



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/343,334 | 06/30/1999 | GREGG M. SKLEDAR | T-5586CIP | 7812 |

7590

03/05/2004

Raymund F. Eich
Williams, Morgan & Amerson
7676 Hillmont, Suite 250
Houston, TX 77040

EXAMINER

JOHNSON, JERRY D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1764 | 25 |

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/343,334

Applicant(s)

SKLEDAR ET AL.

Examiner

Jerry D. Johnson

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1764

The period for seeking court review of the decision by the Board of Patent Appeals and Interferences rendered August 22, 2003 has expired and no further action has been taken by appellant. The proceedings as to the rejected claims are considered terminated; see 37 CFR 1.197(c).

Page 5 of the decision states:

[o]n return of this application to the jurisdiction of the examiner, the appellants and the examiner must analyze whether the subject matter of appealed claims 13-24 would have been obvious over Wu, taken alone or in combination with other prior art, within the meaning of 35 U.S.C. § 103.

Accordingly, prosecution is reopened as to claims 13-24.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sauer.

Sauer, U.S. Patent 3,113, 167, teaches a method of preparing high viscosity synthetic lubricants from alpha olefins and more particularly, the invention relates to a method of preparing high viscosity synthetic lubricating oils by polymerizing alpha-olefins (column 1, lines

Art Unit: 1764

10-17). These polymers without further treatment are useful as lubricants. However, since the polymers as produced are partially unsaturated, i.e., in general about 50 percent of the molecules are unsaturated, it is preferable that the polymers be hydrogenated to remove the unsaturation and consequently increase the oxidation inhibitor susceptibility of the oil (column 5, lines 64-71). The hydrogenation of the polymers may be carried out according to conventional procedures and with conventional hydrogenation catalysts (column 6, lines 6-8). In general, reaction times of about 8 hours have been used to insure complete hydrogenation of the polymer (column 6, lines 13-15).

Given that Sauer ensures "complete hydrogenation," it reasonably appears that Sauer's completely hydrogenated polyalphaolefin would be the same as or an obvious variation of the instantly claimed polyalphaolefin composition. Accordingly, Applicants' claims if not anticipated by 35 U.S.C. § 102, would be obvious under 35 U.S.C. § 103.

Claims 13-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cupples et al.

Cupples et al., U.S Patent 4,282,392, teach a method for preparing a polyalphaolefin oligomer lubricant comprising the step of hydrogenation a liquid oligomer (column 1, lines 11-16). In column 4, lines 4-12 teach

[i]n our hydrogenation procedure, liquid oligomer at an elevated temperature is flowed or trickled over the surface of particles or pellets of the catalyst packed into a column in the presence of hydrogen at elevated pressure. This procedure involves an exceptionally intimate contact of the total liquid oligomer with the catalyst for a substantial period of time, since substantially all of the oligomer is present as a thin liquid film on the catalyst as the oligomer passes through the column.

Art Unit: 1764

Because Cupples et al. teach a hydrogenation step that involves "intimate contact of the total liquid oligomer with the catalyst for a substantial period of time," it reasonably appears that the hydrogenated polyalphaolefin of Cupples et al. would be the same as or an obvious variation of the instantly claimed polyalphaolefin composition. Accordingly, Applicants' claims if not anticipated by 35 U.S.C. § 102, would be obvious under 35 U.S.C. § 103.

Claims 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al.

Wu et al., U.S. Patent 5,276,227, teach liquid hydrocarbon lubricant viscosity index improver compositions having higher shear stability (column 3, lines 10-12). Column 3, lines 47-57 of Wu et al. teach

unless otherwise stated, all references to properties of oligomers or lubricants of the present invention refer as well to products of low unsaturation, as characterized by low bromine number usually lower than 4. If the product has high number-average molecular weight (4,000), then no hydrogenation is needed. If the product has number average molecular weight much lower than 4,000, then hydrogenation is carried out in keeping with the practice well known to those skilled in the art of lubricant production.

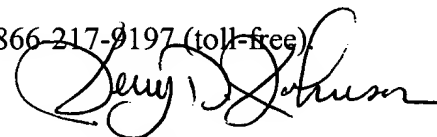
It would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the above teachings and arrive at a polyalphaolefin lubricant composition having the instantly claimed bromine index.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (571) 272-1448. The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1764

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry D. Johnson
Primary Examiner
Art Unit 1764

jdj

Approved



Jacqueline M. Stone, Director
Technology Center 1700